What is claimed is:

1. An optical head for use in a optical read/write apparatus for use with a read/write medium comprising:

a light source, outputting light at an initial light output location;

at least a first photodetector array mounted in a fixed position with respect to said initial light output location, said first photodetector array having at least a first surface defining a photodetector plane;

an optical element unit, mounted in a fixed position with respect to said light output location, said optical element unit having first and second beam shaping optical elements which receive light output at said light output location, said optical element unit further comprising at least a third optical element configured for directing at least a portion of light reflected from said medium along a path for arrival at said first photodetector array;

said optical head providing at least a first optical path, where said first optical path originates at said initial light output location and reaches at least said read/write medium.

2. Apparatus as claimed in Claim 1, wherein said optical element unit has first and second opposite surfaces and wherein said first and second beam-shaping optical elements are formed in said first and second surfaces respectably.

3. Apparatus as claimed in Claim 1, wherein said optical element unit further comprises at least a fourth optical element configured to provide a first focal plane for at least a first portion of light reflected from said medium, said first focal plane spaced a first distance from first photodetector array.

4. Apparatus as claimed in Claim 3, wherein optical elements provided in said optical element unit are further configured to provide a second beam from at least a portion of said light reflected from said medium, said second beam impinging on a second photodetector array, spaced from said first photodetector array.

5. Apparatus as claimed in Claim 4, wherein said second beam has a second focal plane spaced a second distance from said second photodetector array.

6. Apparatus as claimed in Claim 5, wherein said second distance is different from said first distance.

7. Apparatus as claimed in Claim 5, wherein said first focal plane and said second focal plane are on the same side of said photodetector plane.

8. Apparatus as claimed in Claim 5, wherein said first and second focal planes are on opposite sides of said photodetector plane.

9. Apparatus as claimed in Claim 5, wherein said first photodetector and said second photodetector arrays are substantially co-planer.

10. Apparatus as claimed in Claim 1, further comprising a second optical block mounted in a fixed position with respect to said optical element unit, said second optical block configured to at least partially fold said first optical path to define at least a portion of said first optical path which is non-vertical.

11. Apparatus as claimed in Claim 10, wherein said second optical block includes at least a first beam splitter for directing at least a first portion of said light reflected from said medium along a second path having at least a portion different from said first optical path.

12. Apparatus as claimed in Claim 11, wherein said second optical block comprises a second beam splitter.

13. Apparatus as claimed in Claim 12, wherein at least one of said first and second beam splitters is a polarization beam splitter.

14. Apparatus as claimed in Claim 1, wherein said optical element unit is provided in the absence of optical elements configured to change a focal plane of light reflected from said medium.

15. Apparatus as claimed in Claim 1, wherein optical element unit further includes at least a first forward sense optical element configured for directing at least a portion of light from said first optical path to a forward sense detector.

16. Apparatus as claimed in Claim 15, further comprising circuitry for using a signal from said forward sense detector to control a power level of said light source.

17. Apparatus as claimed in Claim 1, further comprising a coating on at least a portion of at least a first surface of said optical element unit.

18. Apparatus as claimed in Claim 17, wherein said coating is a substantially reflective coating.

19. Apparatus as claimed in Claim 17, wherein said coating is a substantially absorptive coating.

20. Apparatus as claimed in Claim 17, wherein said coating is positioned to reduce incidence of stray light at said photodetector.

21. Apparatus as claimed in Claim 17, wherein said coating is an anti-reflective coating.

22. Apparatus as claimed in Claim 1, wherein said optical element unit has at least a first alignment marking positioned on at least a first surface of said optical element unit.

23. Apparatus as claimed in Claim 1, wherein said light source is an edge-emitter laser.

24. Apparatus as claimed in Claim 1, wherein said light source is a VCSEL.

25. Apparatus as claimed in Claim 1, wherein said light source is a blue-light laser.

26. Apparatus as claimed in Claim 10, wherein at least a first surface of said optical element unit, adjacent said second optical block includes at least a first moat region formed therein, adjacent at least a portion of an edge of said surface.

27. Apparatus as claimed in Claim 26, wherein said moat receives at least a portion of adhesive introduced along said edge, said adhesive extending inwardly from said in edge no farther than said moat.

28. An optical head for a read/write apparatus comprising;

a light source;

optics configured to deliver at least a portion of light from said light source to a data medium and to deliver light reflected from said data medium to first and second spaced-apart photodetector arrays, each of said photodetector arrays providing output which is sensitive to position of light along a first axis of said photodetector arrays and substantially insensitive to position of light along a second, substantially perpendicular, axis of said photodetector arrays.

29. Apparatus as claimed in Claim 28, wherein said first photodetector array includes first second and third substantially parallel bar-shaped photodetector regions and wherein said second photodetector array comprises fourth, fifth and sixth substantially parallel bar-shaped photodetector regions.

30. Apparatus as claimed in Claim 29, further comprising circuitry for combining signals from said first, second, third, fourth, fifth and sixth photodetector regions to provide at least a focus error signal and a data signal.

31. Apparatus as claimed in Claim 29, further comprising circuitry for combining output from said first, third, fourth and sixth photodetector arrays regions to provide at least a first tracking error signal.

32. Apparatus as claimed in Claim 30, wherein said focus error signal is substantially a linear function of focus in a focus region including a nominal focus point.

33. Apparatus as claimed in Claim 29, wherein a size of at least said second and fifth photodetector regions, relative to said first and third regions is selected so as to reduce cross talk between a focus error signal and a tracking error signal.

34. Apparatus as claimed in Claim 1, further comprising an objective lens defining rim intensities at each perimeter location of a rim of said objective lens, with respect to a central light intensity, wherein said rim intensity is less than about 80 % in a tangential direction.

35. Apparatus as claimed in Claim 1, further comprising an objective lens defining rim intensities at each perimeter location of a rim of said objective lens, with respect to a central light intensity, wherein said rim intensity is less than about 80 % in a radial direction.

36. Apparatus as claimed in Claim 1, further comprising an objective lens defining rim intensities at each perimeter location of a rim of said objective lens, with respect to a central light intensity, wherein said rim intensity is greater than about 50 % in a tangential direction.

37. Apparatus as claimed in Claim 1, further comprising an objective lens defining rim intensities at each perimeter location of a rim of said objective lens, with respect to a central light intensity, wherein said rim intensity is greater than about 15 % in a radial direction.

38. Apparatus as claimed in Claim 1, wherein greater than 50% of a path length of said first optical path is within a solid structure and less than 50% of said path length of said first optical path is in air.

39. A method for forming an optical head comprising;

mounting a first light source with respect to a substrate;

etching at least first and second beam shaping optical elements in a first optical element unit; and

mounting said optical element unit with respect to said substrate in a position such that said first and second optical elements intercept at least a portion of light generated at said light source.

40. A method as claimed in Claim 39, further comprising mounting a second optical block with respect to said first optical block.

41. A method as claimed in Claim 40, wherein said step of mounting said second optical block is performed before said step of mounting said first optical block with respect to said substrate.

42. A method as claimed in Claim 40, wherein said second optical block is configured to direct at least a portion of said light along a path which is substantially non-vertical.

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